



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

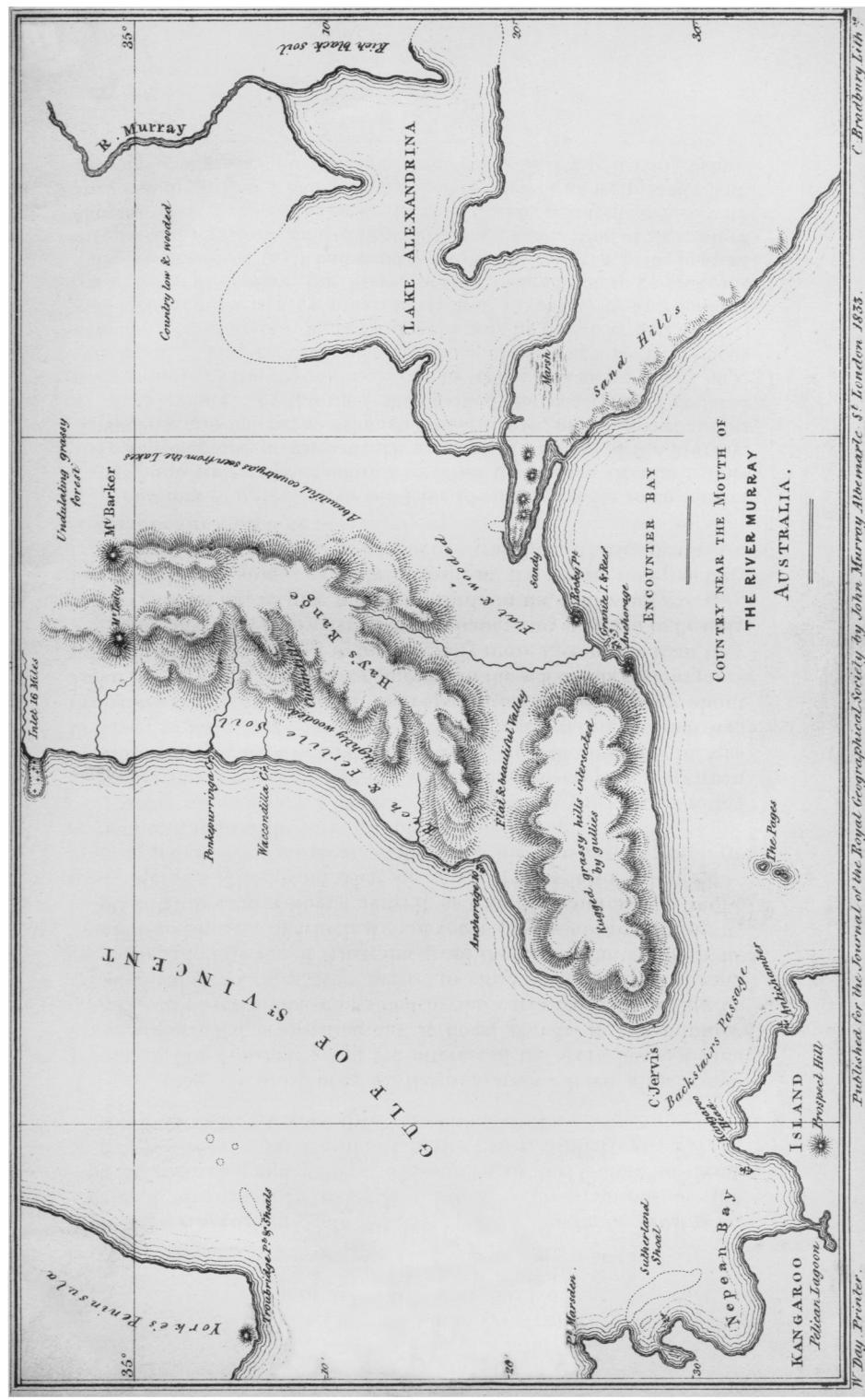
JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

V.—*Two Expeditions into the Interior of Southern Australia*, during the years 1828-29-30-31 : with Observations on the Soil, Climate, and general Resources of the Colony of New South Wales. By Captain Charles Sturt, 39th Regt., F.L.S. and F.R.G.S. 2 vols. 8vo. London. 1833.

THE leading circumstances of these journeys have already appeared in this Journal\*; but the interest of the work has not thus been superseded, consisting, as it does, chiefly in the minuter details and observations contained in the narrative. These are of especial value to those who desire to draw general conclusions regarding the interior of Australia from the facts, limited both in number and range, of which we are yet in possession respecting it. Captain Sturt is a geologist as well as traveller, and is the more ready to generalize from what he saw. He is also a draughtsman, apparently, of no mean skill ; and his illustrations, both of scenery and natural history, are highly interesting.

It being unnecessary, however, to analyze his work (as it were) a second time, we shall merely notice one discrepancy between his observations, as now given by himself, and those which he was believed to have made when the former Paper in this Journal was drawn up. His opinions of the capabilities of the country about Lake Alexandrina (where he came out to the sea on his second journey) appear, in his work, to be generally more favourable than they were conceived to be by Mr. Cunningham : and it seems to be only justice, therefore, to give his own words in the following extract ; the more interesting, as they furnish, at the same time, details regarding the fate of a subsequent traveller, whose death we noticed before in a note :—

“ The foregoing narrative will have given the reader some idea of the state in which the expedition reached the bottom of that extensive and magnificent basin which receives the waters of the Murray. The men were, indeed, so exhausted in strength, and their provisions so much reduced, by the time they gained the coast, that I doubted much whether either would hold out to such place as we might hope for relief. Yet, reduced as the whole of us were from previous exertion, beset as our homeward path was by difficulty and danger, and involved as our eventual safety was in obscurity and doubt, I could not but deplore the necessity that obliged me to re-cross the Lake Alexandrina (as I had named it in honour of the heir-apparent to the British crown), and to relinquish the examination of its western shores. We were borne over its ruffled and agitated surface with such rapidity, that I had scarcely time to view it as we passed ; but, cursory as my glance was, I could not but think I was leaving behind



W. Day, Printer.

Bradbury, Luth

*Published for the Journal of the Royal Geographical Society by John Murray, Alcemarie, Strand, London, 1833.*

me the fullest reward of our toil, in a country that would ultimately render our discoveries valuable, and benefit the colony for whose interests we were engaged. Hurried, I would repeat, as my view of it was, my eye never fell on a country of more promising aspect, or of more favourable position, than that which occupies the space between the lake and the ranges of St. Vincent's Gulf, and, continuing northerly from Mount Barker, stretches away without any visible boundary. It appeared to me, that, unless nature had deviated from her usual laws, this tract of country could not but be fertile, situated as it was to receive the mountain deposits on the one hand, and those of the lake upon the other.

"In my report to the Colonial Government, however, I did not feel myself justified in stating, to their full extent, opinions that were founded on probability and conjecture alone. But, although I was guarded in this particular, I strongly recommended a further examination of the coast, from the most eastern point of Encounter Bay to the head of St. Vincent's Gulf, to ascertain if any other than the known channel existed among the sand-hills of the former; or if, as I had every reason to hope from the great extent of water to the N.W., there was a practicable communication with the lake from the other; and I ventured to predict, that a closer survey of the interjacent country would be attended with the most beneficial results; nor have I a doubt that the promontory of Cape Jervis would ere this have been settled, had Captain Barker lived to complete his official reports.

"This zealous and excellent officer sailed from King George's Sound on the 10th of April, 1831, and arrived off Cape Jervis on the 13th. He was attended by Dr. Davies, one of the assistant-surgeons of his regiment, and by Mr. Kent, of the Commissariat. It is to the latter gentleman that the public are indebted for the greater part of the following details; he having attended Captain Barker closely during the whole of this short but disastrous excursion, and made notes as copious as they are interesting. At the time the Isabella arrived off Cape Jervis, the weather was clear and favourable. Captain Barker consequently stood into St. Vincent's Gulf, keeping as near as practicable to the eastern shore, in soundings that varied from six to ten fathoms, upon sand and mud. His immediate object was to ascertain if there was any communication with the Lake Alexandrina from the gulf. He ascended to lat.  $34^{\circ} 40'$ , where he fully satisfied himself that no channel did exist between them. He found, however, that the ranges behind Cape Jervis terminated abruptly at Mount Lofty, in lat.  $34^{\circ} 56'$ , and that a flat and wooded country succeeded to the N. and N.E. The shore of the gulf trended more to the N. N.W., and mud-flats and mangrove swamps prevailed along it.

"Mr. Kent informs me, that they landed for the first time on the 15th, but that they returned almost immediately to the vessel. On the 17th, Captain Barker again landed, with the intention of remaining on shore for two or three days. He was accompanied by Mr. Kent, his servant Mills, and two soldiers. The boat went to the

place at which they had before landed, as they thought they had discovered a small river with a bar entrance. They crossed the bar, and ascertained that it was a narrow inlet, of four miles in length, that terminated at the base of the ranges. The party were quite delighted with the aspect of the country on either side of the inlet, and with the bold and romantic scenery behind them. The former bore the appearance of natural meadows, lightly timbered, and covered with a variety of grasses. The soil was observed to be a rich, fat, chocolate-coloured earth, probably the decomposition of the deep-blue limestone, that showed itself along the coast hereabouts. On the other hand, a rocky glen made a cleft in the ranges at the head of the inlet; and they were supplied with abundance of fresh water, which remained in the deeper pools that had been filled by the torrents during late rains. The whole neighbourhood was so inviting, that the party slept at the head of the inlet.

"In the morning, Captain Barker proceeded to ascend Mount Lofty, accompanied by Mr. Kent and his servant, leaving the two soldiers at the bivouac, at which he directed them to remain until his return. Mr. Kent says they kept the ridge all the way, and rose above the sea by a gradual ascent. The rock-formation of the lower ranges appeared to be an argillaceous schist; the sides and summit of the ranges were covered with verdure, and the trees upon them were of more than ordinary size. The view to the eastward was shut out by other ranges, parallel to those on which they were; below them, to the westward, the same pleasing kind of country that flanked the inlet still continued.

"In the course of the day, they passed round the head of a deep ravine, whose smooth and grassy sides presented a beautiful appearance. The party stood six hundred feet above the bed of a small rivulet that occupied the bottom of the ravine. In some places huge blocks of granite interrupted its course; in others, the waters had worn the rock smooth. The polish of these rocks was quite beautiful, and the veins of red and white quartz which traversed them looked like mosaic work. They did not gain the top of Mount Lofty, but slept a few miles beyond the ravine. In the morning, they continued their journey, and crossing Mount Lofty, descended northerly to a point from which the range bent away a little to N.N.E., and then terminated. The view from this point was much more extensive than that from Mount Lofty itself. They overlooked a great part of the gulf, and could distinctly see the mountains at the head of it, to the N.N.W. To the N.W. there was a considerable indentation in the coast, which had escaped Captain Barker's notice when examining it. A mountain, very similar to Mount Lofty, bore due east of them, and appeared to be the termination of its range. They were separated by a valley of about ten miles in width, the appearance of which was not favourable. Mr. Kent states to me, that Captain Barker observed at the time, that he thought it probable I had mistaken this hill for Mount Lofty, since it shut out the view of the lake from him, and therefore he naturally concluded I could not have seen Mount

Lofty. I can readily imagine such an error to have been made by me, more especially as I remember, that at the time I was taking bearings in the lake, I thought Captain Flinders had not given Mount Lofty, as I then conceived it to be, its proper position in longitude. Both hills are in the same parallel of latitude. The mistake on my part is obvious. I have corrected it in the charts; and have availed myself of the opportunity thus afforded me of perpetuating, as far as I can, the name of an inestimable companion in Captain Barker himself.

"Immediately below the point on which they stood, Mr. Kent says, a low undulating country extended to the northward, as far as he could see. It was partly open, and partly wooded; and was everywhere covered with verdure. It continued round to the eastward, and apparently ran down southerly, at the opposite base of the Mount Barker range. I think there can be but little doubt that my view from the S.E., that is from the lake, extended over the same or a part of the same country. Captain Barker again slept on the summit of the range, near a large basin that looked like the mouth of a crater, in which huge fragments of rocks made a scene of the utmost confusion. These rocks were a coarse grey granite, of which the higher parts and northern termination of the Mount Lofty range are evidently formed; for Mr. Kent remarks, that it superseded the schistose formation at the ravine we have noticed—and that, subsequently, the sides of the hills became more broken, and valleys, or gullies, more properly speaking, very numerous. Captain Barker estimated the height of Mount Lofty, above the sea, at 2400 feet, and the distance of its summit from the coast at eleven miles. Mr. Kent says, they were surprised at the size of the trees on the immediate brow of it; they measured one, and found it to be forty-three feet in girth. Indeed, he adds, vegetation did not appear to have suffered either from its elevated position or from any prevailing wind. Eucalypti were the general timber on the ranges; one species of which, resembling strongly the black-butted gum, was remarkable for a scent peculiar to its bark.

"The party rejoined the soldiers on the 21st, and enjoyed the supply of fish which they had provided for them. The soldiers had amused themselves by fishing during Captain Barker's absence, and had been abundantly successful. Among others, they had taken a kind of salmon, which, though inferior in size, resembled in shape, in taste, and in the colour of its flesh, the salmon of Europe. I fancied that a fish which I observed, with extremely glittering scales, in the mouth of a seal, when myself on the coast, must have been of this kind; and I have no doubt that the lake is periodically visited by salmon, and that these fish retain their habits of entering fresh water at particular seasons, also, in the southern hemisphere.

"Immediately behind Cape Jervis, there is a small bay, in which, according to the information of the sealers who frequent Kangaroo Island, there is good and safe anchorage for seven months in the year, that is to say, during the prevalence of the E. and N.E. winds.

"Captain Barker landed on the 21st on this rocky point, at the northern extremity of this bay. He had, however, previously to this, examined the indentation in the coast which he had observed from Mount Lofty, and had ascertained that it was nothing more than an inlet; a spit of sand, projecting from the shore at right angles with it, concealed the mouth of the inlet. They took the boat to examine this point, and carried six fathoms soundings round the head of the spit to the mouth of the inlet, when it shoaled to two fathoms; and the landing was observed to be bad, by reason of mangrove swamps on either side of it. Mr. Kent, I think, told me that this inlet was from ten to twelve miles long. Can it be, that a current setting out of it at times has thrown up the sand-bank that protects its mouth, and that trees, or any other obstacle, have hidden its further prolongation from Captain Barker's notice? I have little hope that such is the case, but the remark is not an idle one.

"Between this inlet and the one formerly mentioned, a small and clear stream was discovered, to which Captain Barker kindly gave my name. On landing, the party, which consisted of the same persons as the former one, found themselves in a valley, which opened direct upon the bay. It was confined to the north from the chief range by a lateral ridge, that gradually declined towards, and terminated at, the rocky point on which they had landed. The other side of the valley was formed of a continuation of the main range, which also gradually declined to the south, and appeared to be connected with the hills at the extremity of the cape. The valley was from nine to ten miles in length, and from three to four in breadth. In crossing it, they ascertained that the lagoon from which the schooner had obtained a supply of water, was filled by a water-course that came down its centre. The soil in the valley was rich, but stony in some parts. There was an abundance of pasture over the whole, from amongst which they started numerous kangaroos. The scenery towards the ranges was beautiful and romantic; and the general appearance of the country such as to delight the whole party.

"Preserving a due east course, Captain Barker passed over the opposite range of hills, and descended almost immediately into a second valley that continued to the southwards. Its soil was poor and stony, and it was covered with low scrub. Crossing it, they ascended the opposite range, from the summit of which they had a view of Encounter Bay. An extensive flat stretched from beneath them to the eastward, and was backed in the distance by sand-hummocks and low-wooded hills. The extreme right of the flat rested upon the coast, at a rocky point, near which there were two or three islands. From the left, a beautiful valley opened upon it. A strong and clear rivulet from this valley traversed the flat obliquely, and fell into the sea at the rocky point, or a little to the southward of it. The hills forming the opposite side of the valley had already terminated. Captain Barker, therefore, ascended to higher ground, and at length obtained a view of the Lake Alexandrina, and the channel of its communication with the sea to the N.E. He now descended to the

flat, and frequently expressed his anxious wish to Mr. Kent, that I had been one of their number, to enjoy the beauty of the scenery around them, and to participate in their labours. Had fate so ordained it, it is possible the melancholy tragedy that soon after occurred might have been averted.

"At the termination of the flat they found themselves upon the banks of the channel, and close to the sand-hillock under which my tents had been pitched. From this point they proceeded along the line of sand-hills to the outlet; from which it would appear that Kangaroo Island is not visible, but that the distant point which I mistook for it was the S.E. angle of Cape Jervis. I have remarked, in describing that part of the coast, that there is a sand-hill to the eastward of the inlet, under which the tide runs strong, and the water is deep. Captain Barker judged the breadth of the channel to be a quarter of a mile, and he expressed a desire to swim across it to the sand-hill, to take bearings, and to ascertain the nature of the strand beyond it to the eastward.

"It unfortunately happened that he was the only one of the party who could swim well, in consequence of which his people remonstrated with him on the danger of making the attempt unattended. Notwithstanding, however, that he was seriously indisposed, he stript, and after Mr. Kent had fastened his compass on his head for him, he plunged into the water, and with difficulty gained the opposite side; to effect which took him nine minutes and fifty-eight seconds. His anxious comrades saw him ascend the hillock, and take several bearings; he then descended the farther side, and was never seen by them again.

"It afterwards appeared, that at a very considerable distance from the first sand-hill, there was another, to which Captain Barker must have walked, for the woman stated, that three natives were going to the shore from their tribe, and that they crossed his track. Their quick perception immediately told them it was an unusual impression. They followed upon it, and saw Captain Barker returning. They hesitated for a long time to approach him, being fearful of the instrument he carried. At length, however, they closed upon him: Captain Barker tried to sooth them, but finding they were determined to attack him, he made for the water, from which he could not have been very distant. One of the blacks immediately threw his spear and struck him in the hip. This did not, however, stop him. He got among the breakers, when he received the second spear in the shoulder. On this, turning round, he received a third full in the breast: with such deadly precision do these savages cast their weapons. It would appear that the third spear was already on its flight when Captain Barker turned, and it is to be hoped that it was at once mortal. He fell on his back into the water. The natives then rushed in, and dragging him out by the legs, seized their spears and inflicted innumerable wounds upon his body; after which they threw it into deep water, and the sea-tide carried it away.

"From the same source from which the particulars of his death

were obtained, it was reported that the natives who perpetrated the deed were influenced by no other motive than curiosity to ascertain if they had power to kill a white man. But we must be careful in giving credit to this, for it is much more probable, that the cruelties exercised by the sealers towards the blacks along the south coast may have instigated the latter to take vengeance on the innocent as well as on the guilty. It will be seen, by a reference to the chart, that Captain Barker, by crossing the channel, threw himself into the very hands of that tribe which had evinced such determined hostility to myself and my men. He got into the rear of their strong hold, and was sacrificed to those feelings of suspicion, and to that desire of revenge, which the savages never lose sight of until they have been gratified.

"It yet remains for me to state, that when Mr. Kent returned to the schooner, after this irreparable loss, he kept to the south of the place at which he had crossed the first range with Captain Barker, and travelled through a valley right across the promontory. He thus discovered that there was a division in the ranges, through which there was a direct and level road from the little bay, on the northern extremity of which they had last landed in St. Vincent's Gulf, to the rocky point of Encounter Bay. The importance of this fact will be better estimated when it is known that good anchorage is secured to small vessels inside the island that lies off the point of Encounter Bay, which is rendered still safer by a horse-shoe reef that forms, as it were, a thick wall to break the swell of the sea. But this anchorage is not safe for more than five months in the year. Independently of these points, however, Mr. Kent remarks, that the spit, a little to the mouth of Mount Lofty, would afford good shelter to minor vessels under its lee. When the nature of the country is taken into consideration, and the facility of entering that which lies between the ranges and the Lake Alexandrina, from the south, and of a direct communication with the lake itself, the want of an extensive harbour will, in some measure, be compensated for; more especially when it is known that within four leagues of Cape Jervis, a port, little inferior to Port Jackson, with a safe and broad entrance, exists at Kangaroo Island. The sealers have given this spot the name of American Harbour. In it, I am informed, vessels are completely land-locked, and secure from every wind. Kangaroo Island is not, however, fertile by any means. It abounds in shallow lakes, filled with salt water during high tides, and which by evaporation yield a vast quantity of salt.

"I gathered from the sealers, that neither the promontory separating St. Vincent from Spencer's Gulf, nor the neighbourhood of Port Lincoln, are other than barren and sandy wastes. They all agree in describing Port Lincoln itself as a magnificent roadstead, but equally agree as to the sterility of its shores. It appears, therefore, that the promontory of Cape Jervis owes its superiority to its natural features; in fact, to the mountains that occupy its centre, to the debris that has been washed from them, and to the decomposition of the better description of its rocks. Such is the case at Illawarra,

where the mountains approach the sea ; such indeed is the case every-where, at a certain distance from mountain ranges.

" From the above account it would appear, that a spot has at length been found upon the south coast of New Holland, to which the colonist might venture with every prospect of success ; and in whose valleys the exile might hope to build for himself and for his family a peaceful and prosperous home. All who have ever landed upon the eastern shore of St. Vincent's Gulf, agree as to the richness of its soil and the abundance of its pasture. Indeed, if we cast our eyes upon the chart, and examine the natural features of the country behind Cape Jervis, we shall no longer wonder at its differ-ing in soil and fertility from the low and sandy tracks that generally prevail along the shores of Australia. Without entering largely into the consideration of the more remote advantages that would, in all human probability, result from the establishment of a colony, rather than a penal settlement, at St. Vincent's Gulf, it will be expedient to glance hastily over the preceding narrative, and, disengaging it from all extraneous matter, to condense, as much as possible, the informa-tion it contains respecting the country itself ; for I have been unable to introduce any passing remark, lest I should break the thread of an interesting detail.

" The country immediately behind Cape Jervis may, strictly speak-ing, be termed a promontory, bounded to the west by St. Vincent's Gulf, and to the east by the Lake Alexandrina and the sandy track separating that basin from the sea. Supposing a line to be drawn from the parallel of  $34^{\circ} 40'$  to the eastward, it will strike the Murray River about twenty-five miles above the head of the lake, and will clear the ranges, of which Mount Lofty and Mount Barker are the respective terminations. This line will cut off a space whose greatest breadth will be fifty-five miles, whose length from north to south will be seventy-five, and whose surface exceeds seven millions of acres ; from which if we deduct two millions for the unavailable hills, we shall have five millions of acres of land, of rich soil, upon which no scrub exists, and whose most distant points are accessible, through a level country on the one hand, and by water on the other. The southern extremity of the ranges can be turned by that valley through which Mr. Kent returned to the schooner, after Captain Barker's death. It is certain, therefore, that this valley not only se-cures so grand a point, but also presents a level line of communication from the small bay immediately to the north of the cape, to the rocky point of Encounter Bay ; at both of which places there is safe an-chorage at different periods of the year.

" The only objection that can be raised to the occupation of this spot, is the want of an available harbour. Yet it admits of great doubt whether the contiguity of Kangaroo Island to Cape Jervis, (serving as it does to break the force of the prevailing winds, as also of the heavy swell that would otherwise roll direct into the bay,) and the fact of its possessing a safe and commodious harbour, cer-tainly at an available distance, does not in a great measure remove

the objection. Certain it is, that no port, with the exception of that on the shores of which the capital of Australia is situated, offers half the convenience of this, although it be detached between three and four leagues from the main.

"On the other hand it would appear, that there is no place from which at any time the survey of the more central parts of the continent could be so effectually carried on: for in a country like Australia, where the chief obstacle to be apprehended in travelling is the want of water, the facilities afforded by the Murray and its tributaries are indisputable; and I have little doubt that the very centre of the continent might be gained by a judicious and enterprising expedition. Certainly it is most desirable to ascertain whether the river I have supposed to be the Darling be really so or not. I have stated my objection to dépôts, but I think, that if a party commenced its operations upon the Murray, from the junction upwards, and, after ascertaining the fact of its ultimate course, turned away to the N.W., up one of the tributaries of the Murray, with a supply of six months' provisions, the results would be of the most satisfactory kind, and the features of the country be wholly developed. I cannot, I think, conclude this work better than by expressing a hope that the Colonial Government will direct such measures to be adopted as may be necessary for the extension of our geographical knowledge in Australia. The facilities of fitting out expeditions in New South Wales render the expenses of little moment, when compared with the importance of the object in view; and although I am labouring under the effects of former attempts, yet would I willingly give such assistance as I could, to carry such an object into effect."

---